



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,568	01/24/2001	Steven Matrianni	YOR920000800US1	3575
29683	7590	01/27/2006	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			BRUCKART, BENJAMIN R	
			ART UNIT	PAPER NUMBER
			2155	
DATE MAILED: 01/27/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/768,568	<b>Applicant(s)</b> MASTRIANNI, STEVEN	
	<b>Examiner</b> Benjamin R. Bruckart	<b>Art Unit</b> 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **Detailed Action**

Claims 1-21 are pending in this Office Action.

Claims 1, 10, 16 and 21 are amended.

The 35 U.S.C. 112, second paragraph rejection on claim 21 is withdrawn in light of applicant's amendment.

The objection to the specification is withdrawn in light of applicant's amendment.

### **Response to Arguments**

With regards to claims 1-21, applicant's arguments filed 12/2/05 have been fully considered but are moot in view of the new ground(s) of rejection.

### **Applicant's invention as claimed:**

**Claims 1, 4-10, 13-16, 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,970,869 by Slaughter et al.**

Regarding claim 1, a computer implemented method for discovering data communication network configuration information (Slaughter: col. 7, lines 42-51), comprising steps of:

invoking a network discovery function (Slaughter: col. 13, lines 54-61);

executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Slaughter: col. 34, lines 50-61); and

while executing the invoked network discovery function, building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols (Slaughter: col. 31, lines 39-63; col. 73: col. 38-60).

Regarding claim 4, a method as in claim 1, where building the list operates so as to not overwrite already discovered network configuration information (Slaughter: col. 31, lines 55-66).

Regarding claim 5, a method as in claim 1, wherein the plurality of network configuration discovery protocols are executed in a sequence comprised of a Salutation protocol, a Service Location Protocol (SLP) (Slaughter: col. 34, lines 58-61), a Lightweight Directory Access Protocol (LDAP), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

Regarding claim 6, the method as in claim 1, wherein a list is stored as location object in a persistent database (Slaughter: col. 30, lines 35-48).

Regarding claim 7, a method as in claim 6, wherein a location object is imported into the persistent database, or exported from the persistent database (Slaughter: col. 31, lines 64-col. 32, line 4).

Regarding claim 8, a method as in claim 6, wherein a location object is exported from the persistent database, and made available to be imported into another persistent database (Slaughter: col. 31, lines 64-col. 32, line 4).

Regarding claim 9, a method as in claim 6, wherein an application program queries the persistent database for a location object, and uses the network configuration information stored in the location object while connected to a network from which the location object was derived (Slaughter: col. 13, lines 61- col. 14, lines 11).

Regarding claim 10, a digital data storage media that is readable by a computer and that stores a software program that implements a process for discovering data communication network configuration information (Slaughter: col. 7, lines 42-51), the software program causing the computer to operate so as to invoke a network discovery function (Slaughter: col. 13, lines 54-61), to execute the invoked network discovery function to examine the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Slaughter: col. 34, lines 50-61) and, during the network examination, to build a list containing discovered network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols (Slaughter: col. 31, lines 39-63; col. 73: col. 38-60).

Regarding claim 13, a digital data storage media as claimed in claim 10, wherein the computer executes individual ones of the plurality of network configuration discovery protocols

sequentially in a sequence comprised of a Salutation protocol, a Service Location Protocol (SLP) (Slaughter: col. 34, lines 58-61), a Lightweight Directory Access Protocol (LDAP) (Slaughter: col. 32, lines 1-4), Domain Name Services (DNS) protocols, and a Dynamic Host Configuration Protocol (DHCP).

Regarding claim 14, a digital data storage media as claimed in claim 10, wherein the computer causes the list to be stored as a location object in a persistent database, wherein a location object is imported into the persistent database, or exported from the persistent database, and wherein a location object is exported from the persistent database and made available to be imported into another persistent database (Slaughter: col. 31, lines 64-col. 32, line 4; col. 30, lines 35-48).

Regarding claim 15, a digital data storage media as claimed in claim 14, wherein the computer operates to respond to an application program that queries the persistent database for a location object, to return the location object to the application for use by the application while connected to a network from which the location object was derived (Slaughter: col. 31, lines 64-col. 32, line 4).

Regarding claim 16, a digital data processing system comprising a data processor, a memory, and at least one network adapter for attaching the data processor to a data communication network (Slaughter: col. 14, lines 60- col. 15, line 26), said memory storing a software program that controls said data processor for discovering data communication network configuration information by examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Slaughter: col. 14, lines 60- col.

15, line 19; col. 34, lines 50-61) and, during the network examination for building a location object in a persistent database portion of said memory (Slaughter: col. 30, lines 35-48), said location object containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols for use by an application while attached to the network (Slaughter: col. 31, lines 39-63; col. 73: col. 38-60).

Regarding claim 19, a digital data processing system as claimed in claim 16, wherein the data processor is controlled to execute individual ones of the plurality of network configuration discovery protocols sequentially in a sequence comprised of a Salutation protocol, a Service Location Protocol (SLP) (Slaughter: col. 34, lines 58-61), a Lightweight Directory Access Protocol (LDAP) (Slaughter: col. 32, lines 1-4), Domain Name Services (DNS) protocols (Matsuda: page 3, paragraph 34), and a Dynamic Host Configuration Protocol (DHCP).

Regarding claim 20, a digital data processing system as claimed in claim 16, wherein a location object is imported into the persistent database, or exported from the persistent database, and wherein a location object may be exported from the persistent database and made available to be imported into another persistent database (Slaughter: col. 31, lines 64-col. 32, line 4; col. 30, lines 35-48).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2155

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2-3, 11-12, 17-18 are rejected under 35 U.S.C. 102(e) as being unpatentable by U.S. Patent No. 6,970,869 by Slaughter et al in view of U.S. Patent No. 5,937,162 by Funk et al.**

Regarding claim 2,

The Slaughter reference teaches the method as in claim 1, wherein the protocols taught are SLP and LDAP.

The Slaughter reference does not explicitly state DNS.

The Funk reference teaches DNS discovery protocol (col. 2, lines 46-51).

The Funk reference further teaches relieving the queues of the responsibility of querying the Internet DNS, and by querying the Internet ahead of the scheduled e-mail delivery time the DNS server speeds message delivery (Funk: col. 12, lines 6-11).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to use the network discover protocols to discover network configuration information as taught by Slaughter while employing DNS MX Record protocol as taught by Funk in order to speed up message delivery (Funk: col. 12, lines 6-11).

Regarding claim 3, a method as in claim 2, wherein the DNS protocols comprise at least one of a DNS SRV Record protocol, a DNS MX Record protocol (Funk: col. 2, lines 46-51; col. 11, lines 64- col. 12, line 6), a DNS Start of Authority Protocol, a DNS NS protocol and a DNS PTR protocol.



Regarding claim 11,

The Slaughter reference teaches a digital data storage media as claimed in claim 10, wherein the protocols taught are SLP and LDAP.

The Slaughter reference does not explicitly state DNS.

The Funk reference teaches DNS discovery protocol (col. 2, lines 46-51).

The Funk reference further teaches relieving the queues of the responsibility of querying the Internet DNS, and by querying the Internet ahead of the scheduled e-mail delivery time the DNS server speeds message delivery (Funk: col. 12, lines 6-11).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to use the network discover protocols to discover network configuration information as taught by Slaughter while employing DNS MX Record protocol as taught by Funk in order to speed up message delivery (Funk: col. 12, lines 6-11).

Regarding claim 12, a digital data storage media as claimed in claim 11, wherein the DNS protocols comprise at least one of a DNS SRV Record protocol, a DNS MX Record protocol (Funk: col. 2, lines 46-51; col. 11, lines 64- col. 12, line 6), a DNS Start of Authority Protocol, a DNA NS protocol and a DNS PTR protocol.

Regarding claim 17,

The Slaughter reference teaches a digital data processing system as claimed in claim 16, wherein the protocols taught are SLP and LDAP.

The Slaughter reference does not explicitly state DNS.

The Funk reference teaches DNS discovery protocol (col. 2, lines 46-51).

The Funk reference further teaches relieving the queues of the responsibility of querying the Internet DNS, and by querying the Internet ahead of the scheduled e-mail delivery time the DNS server speeds message delivery (Funk: col. 12, lines 6-11).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to use the network discover protocols to discover network configuration information as taught by Slaughter while employing DNS MX Record protocol as taught by Funk in order to speed up message delivery (Funk: col. 12, lines 6-11).

Regarding claim 18, a digital data processing system as claimed in claim 17, wherein the DNS protocols comprise at least one of a DNS SRV Record protocol, a DNS Mx Record protocol (Funk: col. 2, lines 46-51; col. 11, lines 64- col. 12, line 6), a DNS Start of Authority Protocol, a DNA NS protocol and a DNS PTR protocol.

**Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,970,869 by Slaughter et al in view of U.S. Publication No. 2002/0133573 by Matsuda.**

Regarding claim 21, a computer method for discovering data communication network configuration information (Slaughter: col. 7, lines 42-51), comprising:

invoking a network discovery function (Slaughter: col. 13, lines 54-61);

executing the invoked network discovery function for examining the network using a SLP discovery protocol (Slaughter: col. 34, lines 58-61);

while executing the invoked network discovery function, building a list containing discovered network configuration information (Slaughter: col. 31, lines 39-63; col. 73: col. 38-60).

The Slaughter reference does not explicitly state DHCP or DNS.

The Matsuda reference teaches

executing the invoked network discovery function for examining the network using DNS discovery protocol (Matsuda: page 3, paragraph 34-35);

executing the invoked network discovery function for examining the network using DHCP discovery protocol (Matsuda: page 3, paragraph 34-35; pages 1-2, para 11);

The Matsuda reference further teaches the invention provides easy, comfortable and automatic configuration to users (Matsuda: page 2, para 15).

Therefore it would have been obvious at the time of the invention to one of ordinary skill in the art to use the network discover protocols to discover network configuration information as taught by Slaughter while employing DNS and DHCP as taught by Matsuda in order to provide easy, comfortable features automatically to users.

**Claims 1, 10, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,594,700 by Graham et al.**

Regarding claim 1, a computer implemented method for discovering data communication network configuration information (Graham: col. 1, lines 28-46), comprising steps of:

invoking a network discovery function (Graham: col. 2, lines 28-38);  
executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Graham: col. 2, lines 28-50; col. 6, lines 33-40); and  
while executing the invoked network discovery function, building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols (Graham: col. 6, lines 19-40).

Claims 10 and 16 are rejected as being substantially similar.

**Claims 1, 10, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,477,572 by Elderton et al.**

Regarding claim 1, a computer implemented method for discovering data communication network configuration information (Elderton: col. 5, lines 58-64), comprising steps of:

invoking a network discovery function (Elderton: col. 5, lines 58-64);  
executing the invoked network discovery function for examining the network using individual ones of a plurality of network configuration discovery protocols that are executed sequentially (Elderton: col. 6, lines 35-45); and

while executing the invoked network discovery function, building a list containing network configuration information discovered from said use of said individual ones of said plurality of network configuration discovery protocols (Elderton: col. 6, lines 35-45).

Claims 10 and 16 are rejected as being substantially similar.

#### **MORE PRIOR ART**

U.S. Patent No. 6,978,314 by Tarr teaches location devices and discovering services on a network.

“A Scalable, Deployable Directory Service Framework for the Internet” by Howes et al, Center for Information Technology Integration, University of Michigan, July 11, 1995.

#### **REMARKS**

The applicant has amended the claims to distinguish the invoked network discover function by running individual ones of the listed protocols.

#### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

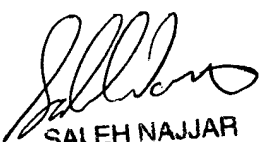
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R. Bruckart whose telephone number is (571) 272-3982. The examiner can normally be reached on 8:00-5:30PM with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Benjamin R Bruckart  
Examiner  
Art Unit 2155

brb



SALEH NAJJAR  
SUPERVISORY PATENT EXAMINER